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A COLLECTING TUBE FOR LIVING INSECTS

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Probably all who have used an ordinary box, tube, or other container of commercial make for collecting living insects in the field have experienced the difficulty of keeping the insects in the container while collecting was being done, especially when other specimens were being introduced. To avoid this difficulty the workers at the Melrose Highlands, Mass., laboratory use a collecting tube equipped with a simple, specially made top. The construction of such a container was worked out by S. F. Potts and A. E. Lantz, both of the Melrose Highlands laboratory. The tube has been used satisfactorily when collecting certain leaf-eating lepidopterous, coleopterous, and sawfly larvae, and coleopterous adults. It could undoubtedly be used to advantage when collecting larvae and adults of many other insect species.

The particular advantage of the specially constructed removable top is that when it is in place insects can be put into the container without removing or opening the top, and the construction of the top is such that insects that are positively phototropic are attracted to its outside limits rather than to the opening in its center.

The collecting tube used is an ordinary heavy cardboard mailing tube with metal screw top. To construct the special top, most of the metal top is cut out, leaving only the threaded portion and an attached ring three eighths inch wide. This ring is bent downward at an angle of about 45 degrees, and to its lower surface is fastened the base of a hollow truncated cone made of rather heavy transparent celluloid. A celluloid cement can be used to fasten the seam in the cone and to fasten the cone to the metal ring. The opening in the apex of each celluloid cone so far constructed is one half inch in diameter. This size of opening has been found to be sufficiently large when collecting such insects as full-grown gipsy moth caterpillars. The diameter could be somewhat lessened if only smaller insects were to be collected.

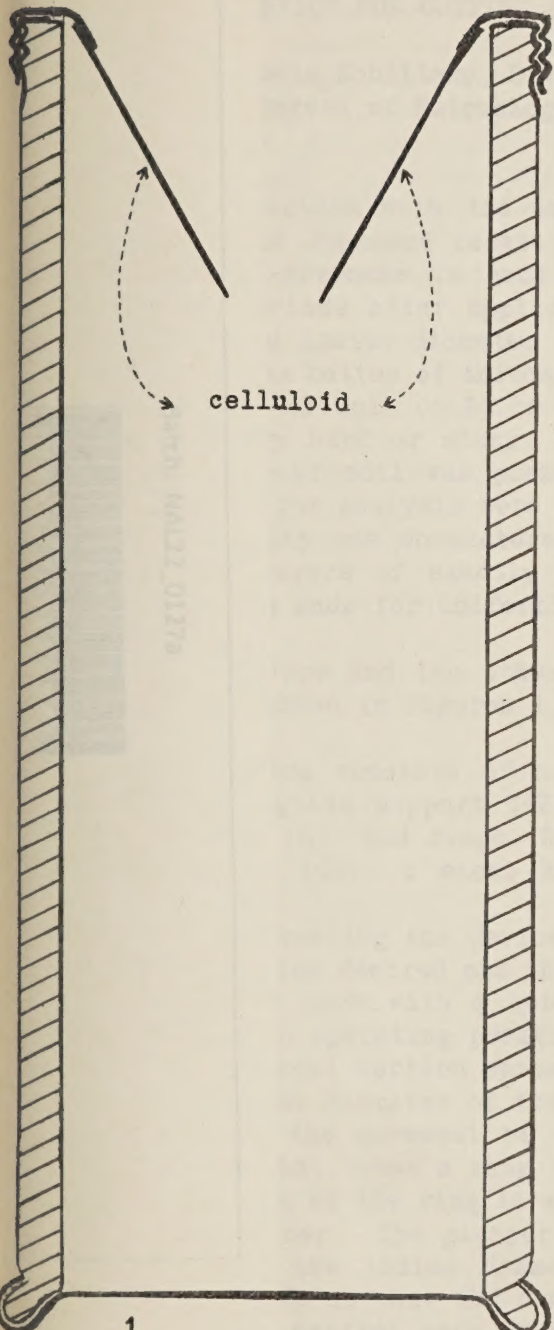
A cross section of one of the collecting tubes, with a specially constructed top in place, is shown, natural size, in the accompanying sketch (fig. 1). Figure 2 is a reproduction of a photograph showing the tube, together with special and standard tops. After the collection of insects has been made the special top is removed and a standard top put in its place. The tube is then ready to be taken to the laboratory, or mailed.

Special tops, similar to the one described for use with a mailing tube, can of course be made for other containers. At the Melrose Highlands laboratory, for instance, a similar top is used on a wooden box designed several years ago for shipping living insects by mail.

Explanation of Illustrations

Figure 1.--Cross section of collecting tube with special top.

Figure 2.--Collecting tube with special and standard tops.


celluloid

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